REMARKS

Applicants thank the Examiner for the consideration given the present application. Claims 1-20 are pending, of which claims 1 and 20 are independent. Claims 1, 4, and 18 are amended to address the issues noted on page 2 of the Office Action and to rectify a minor typographical error. Claims 1-19 are also amended for proper punctuation.

Applicants traverse the rejections under 35 U.S.C. §103(a) of claims 1, 2, 3, 6, 7, 9-19, and 20 as being unpatentable over Roberts et al. (U.S. 5,425,060) in view of Blazo (U.S. 5,754,437), claims 4 and 5 as being unpatentable over Roberts and Blazo in view of Hoffman et al. (U.S. 6,151,076), and claim 8 as being unpatentable over Roberts and Blazo in view of Okubo et al. (U.S. 6,097,766).

Independent claims 1 and 20 are directed to a method of and apparatus for measuring parameters of an electronic system by reference to a series of data samples having a combination of steps and features, including recovering a clock signal from an input signal received from the electronic system, sampling and digitizing the recovered clock signal to produce a series of digital clock samples, processing the digital clock samples digitally with reference to a local digital reference signal to produce digital baseband frequency in-phase (I) and quadrature (Q) components, processing the digital I and Q components to extract digital phase

information of the clock signal, and processing the digital phase information to determine a parameter of the electronic system.

Neither Roberts nor Blazo discloses or suggests the method set forth in Applicants' independent claim 1, upon which claims 2-19 depend, or the apparatus set forth in Applicants' independent claim 20, nor does the addition of Hoffman with respect to claims 4 and 5 or Okubo with respect to claim 8 render these claims obvious.

Despite acknowledging that Roberts does not disclose recovery of a clock signal, the Office Action nonetheless contends such recovery is disclosed by Blazo and alleges it would have been obvious to one of ordinary skill in the art to combine the two references. Applicants respectfully disagree. Contrary to the assertion in the Office Action, the combination of Roberts and Blazo is not obvious. In fact, the combination is not even feasible.

Roberts describes a mechanism for reducing timing jitter in a clock recovery scheme by which, the Roberts abstract states, timing jitter is "substantially reduced." As discussed below, however, Roberts discloses that the parameters of a circuit are adjusted so that jitter tends to zero. One of ordinary skill in the art would not seek to measure jitter using Blazo's technique, which would involve first attempting to reduce precisely the parameter being measured. Such a reduction would make measurement more difficult and potentially less accurate.

The Office Action further asserts that Roberts discloses "a method for reducing timing jitter in a receiver comprising sampling and digitizing the recovered clock signal to produce sample values (means 75)." Again, Applicants respectfully disagree. Rather than "recover" a clock signal as Applicants claim, Roberts samples and digitizes the input signal itself.

The Office Action maintains Roberts discloses "processing the baseband signal to extract digital phase information of the signal." However, this statement misses the point because Applicants' claims require processing digital components to extract digital phase information of a clock signal.

Finally, the Office Action suggests Roberts' processes "the digital phase information to determine a parameter of the electronic system (i.e.[,] timing jitter)." This, too, is inaccurate. Roberts does not "determine" any parameter of an electronic system, let alone timing jitter. Rather, Roberts' circuit reduces a parameter essentially to zero. See column 9, lines 56-66, which reads:

> What is significant is the fact that the output vector contains no phase jitter (imaginary component). Namely, unwanted phase modulation (clock jitter) will manifest itself at the output of square law detector 76 only if, prior to squaring, the signal contains an imaginary (y-axis) component... In accordance with the invention, the presence of an imaginary component (deviation off the real or x-axis) in the prefiltered signal is used as an error signal to adjust the parameters of the prefilter so as to drive the imaginary component to zero.

Thus, it is clear that the purpose of Roberts' circuit is to drive the imaginary component of the output of the square law detector 76, and therefore the phase jitter, substantially to zero. This is evident from column 10, lines 47-50, which indicates "a digital signal processing operator which contains a conventional least mean squared (LMS) algorithm that drives the imaginary component (unwanted phase jitter) to zero."

Since the fundamental purpose of Roberts' technique is to drive unwanted phase jitter to zero, obviously Roberts' circuit does not determine phase jitter. Consequently, one of ordinary skill in the art would not combine the disclosures of Roberts and Blazo as proposed in the Office Action.

Because Roberts and Blazo, taken alone or in combination, fail to disclose or suggest the subject matter of Applicant's independent claims 1 and 20, it is unnecessary to dwell on the tertiary references. For the record, however, Applicants note that Hoffman and Okubo do not cure at least the shortcomings of Roberts and Blazo discussed above with respect to Applicant's independent claims.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are deemed in order, and such action is respectfully requested.

To the extent necessary, Applicants hereby request any required extension of time not otherwise requested and hereby authorize the

Commissioner to charge any prescribed fees not otherwise provided for, including application processing, extension, and extra claims fees, to Deposit Account No. 07-1337.

Respectfully submitted,

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